

# Comparisons of Job Characteristics

**Focus Occupation:** [Structural Iron and Steel Workers \(47-2221\)](#)

**Associated Occupation:** [Structural Metal Fabricators and Fitters \(51-2041\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 84

**Focus Occupation:** Structural Iron and Steel Workers (47-2221)  
**Associated Occupation:** Structural Metal Fabricators and Fitters (51-2041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Design	5.2	10.3	11.2	0	Current knowledge level may be sufficient
Mechanical	6.8	8.6	13.5	>>	Current knowledge level is likely more than sufficient
Building and Construction	4.0	6.9	18.3	>>	Current knowledge level is likely more than sufficient
Production and Processing	6.0	6.9	13.2	>>	Current knowledge level is likely more than sufficient
Engineering and Technology	5.7	6.2	11.5	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 77

**Focus Occupation:** Structural Iron and Steel Workers (47-2221)  
**Associated Occupation:** Structural Metal Fabricators and Fitters (51-2041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation and Control	5.4	5.9	10.8	>>	Skill level is likely more than sufficient
Installation	1.7	2.0	2.5	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 65

**Focus Occupation: Structural Iron and Steel Workers (47-2221)**  
**Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)**

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Visualization	7.5	10.1	12.3	>	Current ability level is likely sufficient
Trunk Strength	5.7	9.5	12.6	>>	Current ability level is likely more than sufficient
Manual Dexterity	6.5	9.2	13.5	>>	Current ability level is likely more than sufficient
Static Strength	5.0	8.3	16.6	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 94

**Focus Occupation: Structural Iron and Steel Workers (47-2221)**  
**Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)**

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Build or repair structures in construction, repair, or manufacturing setting	54
Determine project methods and procedures	76
Erect scaffold	56
Fabricate, assemble, or disassemble manufactured products by hand	11
File, sand, grind, or polish metal or plastic objects	82
Identify base metals for welding	68
Identify properties of metals for repair or fabrication activities	71
Make independent judgment in assembly procedures	64
Move or fit heavy objects	8
Operate hoist, winch, or hydraulic boom	34
Perform safety inspections in construction or resource extraction setting	46
Perform safety inspections in industrial, manufacturing or repair setting	32
Position, align, or level machines, equipment, or structures	74
Read blueprints	10
Read specifications	23
Recognize characteristics of alloys	71
Recognize characteristics of metals	62
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use precision measuring tools or equipment	17
Use turnbuckle in structural repair or assembly work	92
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 77

**Focus Occupation: Structural Iron and Steel Workers (47-2221)**  
**Associated Occupation: Structural Metal Fabricators and Fitters (51-2041)**

Tools and Technologies	Exclusivity
Computers	1
Cutting and crimping and punching tools	3
Cutting tools	18
Fastener setting tools	12
Finance accounting and enterprise resource planning ERP software	2
Forming tools	2
Holding and clamping tools	3
Ladders and scaffolding	6
Lifting equipment and accessories	3
Marking tools	11
Measuring and layout tools	3
Power tools	2
Prying and bending tools	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.